

## **Collapsible Closet**

2

### **3 Background of Invention**

#### **4 Field of Invention**

5 The present invention is related to a collapsible closet.

6

## 7 Related Prior Art

8 Referring to Figure 7, a conventional closet 100 includes a bottom board  
9 110, two lateral planks 120, a rear plank 130 and a top board 140. The  
10 lateral planks 120 are installed on the bottom board 110. The rear plank  
11 130 is installed on the bottom board 110 and connected with both of the  
12 lateral planks 120. The top board 140 is installed on the lateral planks  
13 120 and the rear plank 130. The closet 100 is not collapsible and hence  
14 occupies a large space during storage and transportation.

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16 The present invention is therefore intended to obviate or at least alleviate  
17 the problem encountered in prior art.

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19 Summary of Invention

20 It is an objective of the present invention to provide a collapsible closet  
21 that can occupy only a small space during storage and transportation.

22

23 According to the present invention, a collapsible closet includes a front  
24 frame, a rear frame and two foldable lateral plank assemblies through  
25 which the front frame is connected with the rear frame.

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1 Other objects, advantages, and novel features of the invention will  
2 become more apparent from the following detailed description when  
3 taken in conjunction with the attached drawings.

4

5 **Brief Description of Drawings**

6 The present invention will be described through detailed illustration of  
7 the preferred embodiment referring to the drawings.

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9 Figure 1 is a perspective view of a collapsible closet in a closed position  
10 according to the preferred embodiment of the present invention.

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12 Figure 2 is a perspective partial view of the collapsible closet of Figure 1  
13 in an open position.

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15 Figure 3 is a perspective partial view of the collapsible closet of Figure 1  
16 in a half collapsed position.

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18 Figure 4 is a perspective partial view of the collapsible closet of Figure 1  
19 in a completely collapsed position.

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21 Figure 5 is an exploded view of the collapsible closet of Figure 4.

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23 Figure 6 is an enlarged exploded partial view of the collapsible closet of  
24 Figure 5.

25

26 Figure 7 is an exploded view of a conventional closet.

1    **Detailed Description of Embodiments**

2    Referring to Figures 1 and 2, a collapsible closet 1 includes a front frame  
3    and a rear frame.

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5    The front frame includes two front legs 10, a first crossbar 11, a second  
6    crossbar 12 and a third crossbar 13. The front legs 10 can stand on the  
7    ground. The front legs 10 are connected with each other by means of  
8    the crossbars 11, 12 and 13.

9

10   The rear frame includes two rear legs 20 that can stand on the ground.

11

12   Two doors 40 are attached to the front frame between the first crossbar 11  
13   and the second crossbar 12. Each of the doors 40 is pivotally connected  
14   with one of the front legs 10.

15

16   Two doors 50 are attached to the front frame between the second crossbar  
17   12 and the third crossbar 13. Each of the doors 50 is pivotally  
18   connected with one of the front legs 10.

19

20   A rear plank 60 is attached to the rear frame.

21

22   The collapsible closet 1 includes two foldable lateral plank assemblies 30  
23   through which the front frame is connected with the rear frame. Each of  
24   the foldable lateral plank assemblies 30 includes two lateral planks 31  
25   connected with each other. In each foldable lateral plank assembly 30,  
26   one lateral plank 31 is pivotally connected with one of the front legs 11

1 by means of three hinges 90 and the other lateral plank 31 is pivotally  
2 connected with one of the rear legs 20 by means of three hinges 90.

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4 A top board 70 can be mounted on the front frame, the rear frame and the  
5 foldable lateral plank assemblies 30.

6

7 Several boards 80 are installed in the collapsible closet 1.

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9 Referring to Figures 3 and 4, the top board 70 and the boards 80 are  
10 removed from the collapsible closet 1. Thus, the foldable lateral plank  
11 assemblies 30 can be folded. That is, the collapsible closet 1 can be  
12 collapsed. As collapsed, the collapsible closet 1 occupies a small space.

13

14 Referring to Figures 5 and 6, three hallow cavities 22 are defined in each  
15 of the rear legs 20 for receiving the hinges 90. In the bottom of each  
16 shallow cavity 22, a deep cavity 24 and two holes 26 are defined. The  
17 deep cavity 24 is located between the holes 26.

18

19 Three shallow cavities 32 are defined in an edge of each of the lateral  
20 planks 31 for receiving the hinges 90. In the bottom of each shallow  
21 cavity 32, a deep cavity 34 and two holes 36 are defined. The deep  
22 cavity 34 is located between the holes 36.

23

24 For convenience, only one exemplary hinge 90, rear leg 20 and lateral  
25 plank 31 will be described in detail referring to Figure 6.

26

1 The hinge 90 includes two members 91 and several strips 96 for  
2 connecting the members 21 with each other. How the members 91 are  
3 connected with each other by means of the strips 96 will not be described  
4 in detail for being conventional. Each member 91 includes a plate 92  
5 and a stem 94 extending from the plate 92. The plate 92 defines two  
6 apertures 93 corresponding to the holes 26 and 36. The stem 91 defines  
7 a recess for receiving the strips 26.

8

9 In assembly, the stem 94 of first one of the members 91 ("first member")  
10 is fit in the deep cavity 24 and the plate 92 of the first member 91 is fit in  
11 the shallow cavity 22. As embedded in the rear leg 20, the first member  
12 91 will not hurt any person while working with the collapsible closet 1.  
13 A bolt 23 is driven into each hole 26 through one hole 93 of the first  
14 member 91. Thus, the first member 91 is attached to the rear leg 20.  
15 The stem 94 of second one of the members 91 ("second member") is fit in  
16 the deep cavity 34 and the plate 92 of the second member 91 is fit in the  
17 shallow cavity 32. As embedded in the rear leg 20, the second member  
18 91 will not hurt any person while working with the collapsible closet 1.  
19 A bolt 23 is driven into each hole 36 through one hole 93 of the second  
20 member 91. Thus, the second member 91 is attached to the edge of the  
21 lateral plank 31.

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23 The hinges 90 used to connect one lateral plank 31 with the other lateral  
24 plank 31 in each foldable plank assembly 30 are preferably hinges made  
25 available with item nos. 20572, 20573, 20574, 21571 and 21527 by Four  
26 Winds Corporation based on 12<sup>th</sup> Floor, No. 176, Section 1, Keelung

1 Road, Taipei, Taiwan. Of course, other appropriate hinges may be used  
2 in the present invention.

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4 The present invention has been described through detailed illustration of  
5 the preferred embodiment. Those skilled in the art can derive many  
6 variations from the preferred embodiment without departing from the  
7 scope of the present invention. Therefore, the preferred embodiment  
8 shall not limit the scope of the present invention. The scope of the  
9 present invention is defined in the attached claims.

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